

In the Claims:

This listing of the claims will replace all other prior versions and listing of claims.

1. (currently amended) An isolated polynucleotide comprising a member selected from the group consisting of:

- (a) a polynucleotide encoding the polypeptide ~~as set forth in Figure 1 of SEQ ID NO:2;~~
- (b) a polynucleotide encoding a mature polypeptide encoded by the DNA contained in ATCC Deposit No. 97184;
- (c) a polynucleotide capable of hybridizing to and which is at least 70% identical to the polynucleotide of (a) or (b); and
- (d) a polynucleotide fragment of the polynucleotide of (a) or (b).

2-9. (canceled).

10. (currently amended) An antibody against the polypeptide of claim [[9]] 21.

11. (currently amended) A compound which activates the polypeptide of claim [[9]] 21.

12. (currently amended) A compound which inhibits activation of the polypeptide of claim [[9]] 21.

13. (original) A method for the treatment of a patient having need to activate a G-protein PAF receptor comprising: administering to the patient a therapeutically effective amount of the compound of claim 11.

14. (original) A method for the treatment of a patient having need to inhibit a G-protein PAF receptor comprising: administering to the patient a therapeutically effective amount of the compound of claim 12.

15. (original) The method of claim 13 wherein said compound is a polypeptide and a therapeutically effective amount of the compound is administered by providing to the patient DNA encoding said agonist and expressing said agonist *in vivo*.

16. (currently amended) A process for diagnosing a disease or a susceptibility to a disease related to an under-expression of the polypeptide of claim [[9]] 21 comprising determining a mutation in the nucleic acid sequence encoding said polypeptide.

17. (canceled).

18. (currently amended) A diagnostic process comprising analyzing for the presence of the polypeptide of claim [[9]] 21 in a sample derived from a host.

19. (currently amended) A method for identifying compounds which bind to and activate and which bind to and inhibit the receptor polypeptide of claim [[9]] 21 comprising:

(a) contacting a cell expressing on the surface thereof the receptor polypeptide, said receptor being associated with a second component capable of providing a detectable signal in response to the binding of a compound to said receptor polypeptide, with a compound under conditions sufficient to permit binding of the compound to the receptor polypeptide; and

(b) identifying if the compound is an effective agonist or antagonist by detecting the presence or absence of the signal produced by said second component.

20. (canceled).

21. (New) An isolated protein comprising an amino acid sequence selected from the group consisting of:

- (a) amino acid residues 1 to 337 of SEQ ID NO:2; and
- (b) amino acid residues 2 to 337 of SEQ ID NO:2.

22. (New) The isolated protein of claim 21 which comprises amino acid sequence (a).

23. (New) The isolated protein of claim 21 which comprises amino acid sequence (b).

24. (New) The isolated protein of claim 21 wherein the amino acid sequence further comprises a heterologous polypeptide.

25. (New) The isolated protein of claim 21 wherein said isolated protein is glycosylated.

26. (New) The isolated protein of claim 21 wherein said isolated protein is fused to polyethylene glycol.

27. (New) A protein produced by a method comprising:

- (a) expressing the protein of claim 21 by a cell; and
- (b) recovering the protein.

28. (New) A composition comprising the isolated protein of claim 21 and a pharmaceutically acceptable carrier.

29. (New) An isolated protein comprising an amino acid sequence selected from the group consisting of:

- (a) an amino acid sequence of the full-length polypeptide encoded by the cDNA in ATCC Deposit No. 97184;

(b) an amino acid sequence of the full-length polypeptide, excluding the N-terminal methionine residue, encoded by the cDNA in ATCC Deposit No. 97184; and

(c) an amino acid sequence of the mature polypeptide encoded by the cDNA in ATCC Deposit No. 97184.

30. (New) The isolated protein of claim 29 which comprises amino acid sequence (a).

31. (New) The isolated protein of claim 29 which comprises amino acid sequence (b).

32. (New) The isolated protein of claim 29 which comprises amino acid sequence (c).

33. (New) The isolated protein of claim 29 wherein the amino acid sequence further comprises a heterologous polypeptide.

34. (New) The isolated protein of claim 29 wherein said isolated protein is glycosylated.

35. (New) The isolated protein of claim 29 wherein said isolated protein is fused to polyethylene glycol.

36. (New) A protein produced by a method comprising:

- (a) expressing the protein of claim 29 by a cell; and
- (b) recovering the protein.

37. (New) A composition comprising the isolated protein of claim 29 and a pharmaceutically acceptable carrier.

38. (New) An isolated protein comprising a first amino acid sequence 90% or more identical to a second amino acid sequence selected from the group consisting of:

- (a) amino acid residues 1 to 337 of SEQ ID NO:2; and
- (b) amino acid residues 2 to 337 of SEQ ID NO:2.

39. (New) The isolated protein of claim 38 wherein the first amino acid sequence is 90% or more identical to the second amino acid sequence (a).

40. (New) The isolated protein of claim 38 wherein the first amino acid sequence is 90% or more identical to the second amino acid sequence (b).

41. (New) The isolated protein of claim 38 wherein the first amino acid sequence is 95% or more identical to the second amino acid sequence (a).

42. (New) The isolated protein of claim 38 wherein the first amino acid sequence is 95% or more identical to the second amino acid sequence (b).

43. (New) The isolated protein of claim 38 wherein the amino acid sequence further comprises a heterologous polypeptide.

44. (New) The protein of claim 38 wherein said isolated protein is glycosylated.

45. (New) The protein of claim 38 wherein said isolated protein is fused to polyethylene glycol.

46. (New) A protein produced by a method comprising:

- (a) expressing the protein of claim 38 by a cell; and
- (b) recovering the protein.

47. (New) A composition comprising the isolated protein of claim 38 and a pharmaceutically acceptable carrier.

48. (New) An isolated protein comprising a first amino acid sequence 90% or more identical to a second amino acid sequence selected from the group consisting of:

(a) an amino acid sequence of the full-length polypeptide encoded by the cDNA in ATCC Deposit No. 97184;

(b) an amino acid sequence of the full-length polypeptide, excluding the N-terminal methionine residue, encoded by the cDNA in ATCC Deposit No. 97184; and

(c) an amino acid sequence of the mature polypeptide encoded by the cDNA in ATCC Deposit No. 97184.

49. (New) The isolated protein of claim 48 wherein the first amino acid sequence is 90% or more identical to the second amino acid sequence (a).

50. (New) The isolated protein of claim 48 wherein the first amino acid sequence is 90% or more identical to the second amino acid sequence (b).

51. (New) The isolated protein of claim 48 wherein the first amino acid sequence is 90% or more identical to the second amino acid sequence (c).

52. (New) The isolated protein of claim 48 wherein the first amino acid sequence is 95% or more identical to the second amino acid sequence (a).

53. (New) The isolated protein of claim 48 wherein the first amino acid sequence is 95% or more identical to the second amino acid sequence (b).

54. (New) The isolated protein of claim 48 wherein the first amino acid sequence is 95% or more identical to the second amino acid sequence (c).

55. (New) The isolated protein of claim 48 wherein the amino acid sequence further comprises a heterologous polypeptide.

56. (New) The isolated protein of claim 48 wherein said isolated protein is glycosylated.

57. (New) The isolated protein of claim 48 wherein said isolated protein is fused to polyethylene glycol.

58. (New) A protein produced by a method comprising:

- (a) expressing the protein of claim 48 by a cell; and
- (b) recovering the protein.

59. (New) A composition comprising the isolated protein of claim 48 and a pharmaceutically acceptable carrier.

60. (New) An isolated protein comprising an amino acid sequence selected from the group consisting of:

- (a) amino acid residues 1 to 337 of SEQ ID NO:2, wherein the protein has at least one conservative substitution; and
- (b) an amino acid sequence comprising a fragment of amino acid residues 1 to 337 of SEQ ID NO:2, wherein the fragment binds an antibody that specifically binds to a polypeptide having the sequence of SEQ ID NO:2.

61. (New) The isolated protein of claim 60 which comprises amino acid sequence (a).

62. (New) The isolated protein of claim 60 which comprises amino acid sequence (b).

63. (New) The isolated protein of claim 60 wherein the amino acid sequence further comprises a heterologous polypeptide.

64. (New) The isolated protein of claim 60 wherein said isolated protein is glycosylated.

65. (New) The isolated protein of claim 60 wherein said isolated protein is fused to polyethylene glycol.

66. (New) A protein produced by a method comprising:

- (a) expressing the protein of claim 60 by a cell; and
- (b) recovering the protein.

67. (New) A composition comprising the isolated protein of claim 60 and a pharmaceutically acceptable carrier.

68. (New) An isolated protein comprising an amino acid sequence selected from the group consisting of:

- (a) an amino acid sequence of the full-length polypeptide encoded by the cDNA in ATCC Deposit No. 97184, wherein the amino acid sequence has at least one conservative substitution; and
- (b) a fragment of the full-length polypeptide encoded by the cDNA in ATCC Deposit No. 97184, wherein the fragment binds an antibody that specifically binds to a polypeptide having the sequence of SEQ ID NO:2.

69. (New) The isolated protein of claim 68 which comprises amino acid sequence (a).

70. (New) The isolated protein of claim 68 which comprises amino acid sequence (b).

71. (New) The isolated protein of claim 68 wherein the amino acid sequence further comprises a heterologous polypeptide.

72. (New) The isolated protein of claim 68 wherein said isolated protein is glycosylated.

73. (New) The isolated protein of claim 68 wherein said isolated protein is fused to polyethylene glycol.

74. (New) A protein produced by a method comprising:

- (a) expressing the protein of claim 68 by a cell; and
- (b) recovering the protein.

75. (New) A composition comprising the isolated protein of claim 68 and a pharmaceutically acceptable carrier.

76. (New) An isolated protein comprising at least 30 contiguous amino acid residues of SEQ ID NO:2.

77. (New) The isolated protein of claim 76 wherein the isolated protein comprises at least 50 contiguous amino acid residues of SEQ ID NO:2.

78. (New) The isolated protein of claim 76 wherein the isolated protein binds an antibody that specifically binds to a polypeptide having the sequence of SEQ ID NO:2.

79. (New) The isolated protein of claim 76 wherein the amino acid sequence further comprises a heterologous polypeptide.

80. (New) The isolated protein of claim 76 wherein said isolated protein is glycosylated.

81. (New) The isolated protein of claim 76 wherein said isolated protein is fused to polyethylene glycol.

82. (New) A protein produced by a method comprising:

- (a) expressing the protein of claim 76 by a cell; and
- (b) recovering the protein.

83. (New) A composition comprising the isolated protein of claim 76 and a pharmaceutically acceptable carrier.

84. (New) An isolated protein comprising at least 30 contiguous amino acid residues encoded by the cDNA in ATCC Deposit No. 97184.

85. (New) The isolated protein of claim 84 wherein the isolated protein comprises at least 50 contiguous amino acid residues encoded by the cDNA in ATCC Deposit No. 97184.

86. (New) The isolated protein of claim 84 wherein the isolated protein binds an antibody that specifically binds to a polypeptide having the sequence of SEQ ID NO:2.

87. (New) The isolated protein of claim 84 wherein the amino acid sequence further comprises a heterologous polypeptide.

88. (New) The isolated protein of claim 84 wherein said isolated protein is glycosylated.

89. (New) The isolated protein of claim 84 wherein said isolated protein is fused to polyethylene glycol.

90. (New) A protein produced by a method comprising:

- (a) expressing the protein of claim 84 by a cell; and
- (b) recovering the protein.

91. (New) A composition comprising the isolated protein of claim 84 and a pharmaceutically acceptable carrier.